## Changes to the List of Per- and Polyfluoroalkyl Substances (PFAS) Added to the TRI Chemical List by Section 7321 of the National Defense Authorization Act for Fiscal Year 2020 (NDAA)

On December 20, 2019, the NDAA was signed into law. Among other provisions, Section 7321 adds certain PFAS to the EPCRA Section 313 list of reportable toxic chemicals as of January 1, 2020. Specifically, the NDAA identifies 14 chemicals by name and/or Chemical Abstract Service Registry Number (CASRN) in Section 7321(b) and identifies additional PFAS based on the following criteria:

"(i) listed as an active chemical substance in the February 2019 update to the TSCA Inventory under section 8(b)(1) and (ii) on the date of enactment of this Act, subject to the provisions of—

- (I) section 721.9582 of title 40, Code of Federal Regulations; or
- (II) section 721.10536 of title 40, Code of Federal Regulations."

EPA has reviewed the above-listed criteria and found 170 chemicals that are not subject to a claim of protection from disclosure and meet the requirements of this part of the NDAA. Twelve of these are among the 14 PFAS specifically listed in the NDAA; with the addition of the other two, there are a total of 172 PFAS subject to listing under the NDAA.

EPA previously provided a list of PFAS added by the NDAA (the earlier version listed 160 PFAS). Following review of the previously provided list, and in response to comments from stakeholders regarding its content, EPA has removed 12 PFAS that did not meet the structural definitions provided by 721.10536 and has added 24 that do meet those definitions. These 24 additional PFAS were included on this updated list because (1) their structure meets the PFAS category definition provided by 40 CFR 721.10536 or (2) though the name of the PFAS does not indicate a specific chain length, its chain length could fit within a definition provided by 721.10536.

The 24 PFAS added and the 12 PFAS that were deleted from the original list of 160 are listed below.

## **PFAS Added**

<u>CASRN</u>	<u>Chemical Name</u>
65530-59-8	Poly(difluoromethylene), $\alpha$ -fluoro- $\omega$ -(2-hydroxyethyl)-, 2-hydroxy-1,2,3-propanetricarboxylate (3:1)
65530-61-2	Poly(difluoromethylene), $\alpha$ -fluoro- $\omega$ -[2-(phosphonooxy)ethyl]-
65530-62-3	$Poly(difluoromethylene), \ \alpha, \alpha'-[phosphinicobis(oxy-2,1-ethanediyl)]bis[\omega-fluoro-poly(difluoromethylene)] \ but the properties of the p$
65530-63-4	Ethanol, 2,2'-iminobis-, compd. with $\alpha$ -fluoro- $\omega$ -[2-(phosphonooxy)ethyl] poly(difluoromethylene) (2:1)
65530-64-5	Ethanol, 2,2'-iminobis-, compd. with $\alpha,\alpha'$ -[phosphinicobis(oxy-2,1-ethanediyl)]bis[ $\omega$ -fluoropoly(difluoromethylene)] (1:1)
65530-65-6	Poly(difluoromethylene), $\alpha$ -fluoro- $\omega$ -[2-[(1-oxooctadecyl)oxy]ethyl]-
65530-66-7	Poly(difluoromethylene), $\alpha$ -fluoro- $\omega$ -[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]-

65530-69-0	Poly(difluoromethylene), $\alpha$ -[2-[(2-carboxyethyl)thio]ethyl]- $\omega$ -fluoro-, lithium salt
65530-70-3	Poly(difluoromethylene), $\alpha,\alpha'$ -[phosphinicobis(oxy-2,1-ethanediyl)]bis[ $\omega$ -fluoro-, ammonium salt
65530-71-4	Poly(difluoromethylene), $\alpha$ -fluoro- $\omega$ -[2-(phosphonooxy)ethyl]-, monoammonium salt
65530-72-5	Poly(difluoromethylene), $\alpha$ -fluoro- $\omega$ -[2-(phosphonooxy)ethyl]-, diammonium salt
65530-74-7	Ethanol, 2,2'-iminobis-, compd. with $\alpha$ -fluoro- $\omega$ -[2-(phosphonooxy)ethyl] poly(difluoromethylene) (1:1)
65530-83-8	Poly(difluoromethylene), $\alpha$ -[2-[(2-carboxyethyl)thio]ethyl]- $\omega$ -fluoro-
65605-56-3	Poly(difluoromethylene), $\alpha$ -fluoro- $\omega$ -(2-hydroxyethyl)-, dihydrogen 2-hydroxy-1,2,3-propanetricarboxylate
65605-57-4	Poly(difluoromethylene), $\alpha$ -fluoro- $\omega$ -(2-hydroxyethyl)-, hydrogen 2-hydroxy-1,2,3-propanetricarboxylate
65605-58-5	2-Propenoic acid, esters, 2-methyl-, dodecyl ester, polymer with $\alpha$ -fluoro- $\omega$ -[2-[(2-methyl-1-oxo-2-propen-1-yl)oxy]ethyl]poly(difluoromethylene)
65605-59-6	2-Propenoic acid, 2-methyl-, dodecyl ester, polymer with $\alpha$ -fluoro- $\omega$ -[2-[(2-methyl-1-oxo-2-propen-1-yl)oxy]ethyl]poly(difluoromethylene) and N-(hydroxymethyl)-2-propenamide
65605-73-4	Poly(difluoromethylene), $\alpha$ -fluoro- $\omega$ [2-[(1-oxo-2-propenyl)oxy]ethyl]-, homopolymer
65636-35-3	Ethanaminium, N,N-diethyl-N-methyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, methyl sulfate, polymer with 2-ethylhexyl 2-methyl-2-propenoate, $\alpha$ -fluoro- $\omega$ -[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]poly(difluoromethylene), 2-hydroxyethyl 2-methyl-2-propenoate and N-(hydroxymethyl)-2-propenamide
68239-43-0	2-Propenoic acid, 2-methyl-, 2-ethylhexyl ester, polymer with $\alpha$ -fluoro- $\omega$ -[2-[(2-methyl-1-oxo-2-propen-1-yl)oxy]ethyl]poly(difluoromethylene), 2-hydroxyethyl 2-methyl-2-propenoate and N-(hydroxymethyl)-2-propenamide
74499-44-8	Phosphoric acid, $\gamma$ - $\omega$ -perfluoro-C8-16-alkyl esters, compds. with diethanolamine
80010-37-3	Poly(difluoromethylene), $\alpha$ -fluoro- $\omega$ -[2-sulphoethyl)-
95144-12-0	Poly(difluoromethylene), $\alpha$ -fluoro- $\omega$ -[2-(phosphonooxy)ethyl]-, ammonium salt
123171-68-6	Poly(difluoromethylene), $\alpha$ -[2-(acetyloxy)-3-[(carboxymethyl)dimethylammonio]propyl]- $\omega$ -fluoro-, inner salt

## **PFAS Deleted**

<u>CASRN</u>	<u>Chemical Name</u>
307-70-0	1-Undecanol, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11-eicosafluoro-

355-50-0	Hexadecane, 1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14, 15,15,16,16-tritriacontafluoro-16-iodo-
423-62-1	Decane, 1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10-heneicosafluoro-10-iodo-
507-63-1	Octane, 1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8-heptadecafluoro-8-iodo-
2144-53-8	2-Propenoic acid, 2-methyl-, 3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl ester
26738-51-2	3,6,9,12-Tetraoxapentadecane, 1,1,1,2,4,4,5,7,7,8,10,10,11,13,13,14,14,15,15,15-eicosafluoro-5,8,11-tris(trifluoromethyl)-
27619-97-2	1-Octanesulfonic acid, 3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluoro-
29809-34-5	Eicosane, 1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,15,15, 16,16,17,17,18,18,19,19,20,20-hentetracontafluoro-20-iodo-
29809-35-6	Octadecane, 1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,15,15, 16,16,17,17,18,18-heptatriacontafluoro-18-iodo-
52591-27-2	1,1,2,2-Tetrahydroperfluorohexyl acrylate
69116-73-0	Methyl perfluoro[8-(fluoroformyl)-5-methyl-4,7-dioxanonanoate]
79070-11-4	Poly(difluoromethylene), $\alpha$ -chloro- $\omega$ -(2,2-dichloro-1,1,2-trifluoroethyl)-